

WOOL INDUSTRY HERE OWES MUCH TO CANADA

United States Worsteds Mills
First Depended on That
Country.

WORK LONG DONE IN HOMES

Invention of Carding, Spinning
and Weaving Machinery
Led to Factory System.

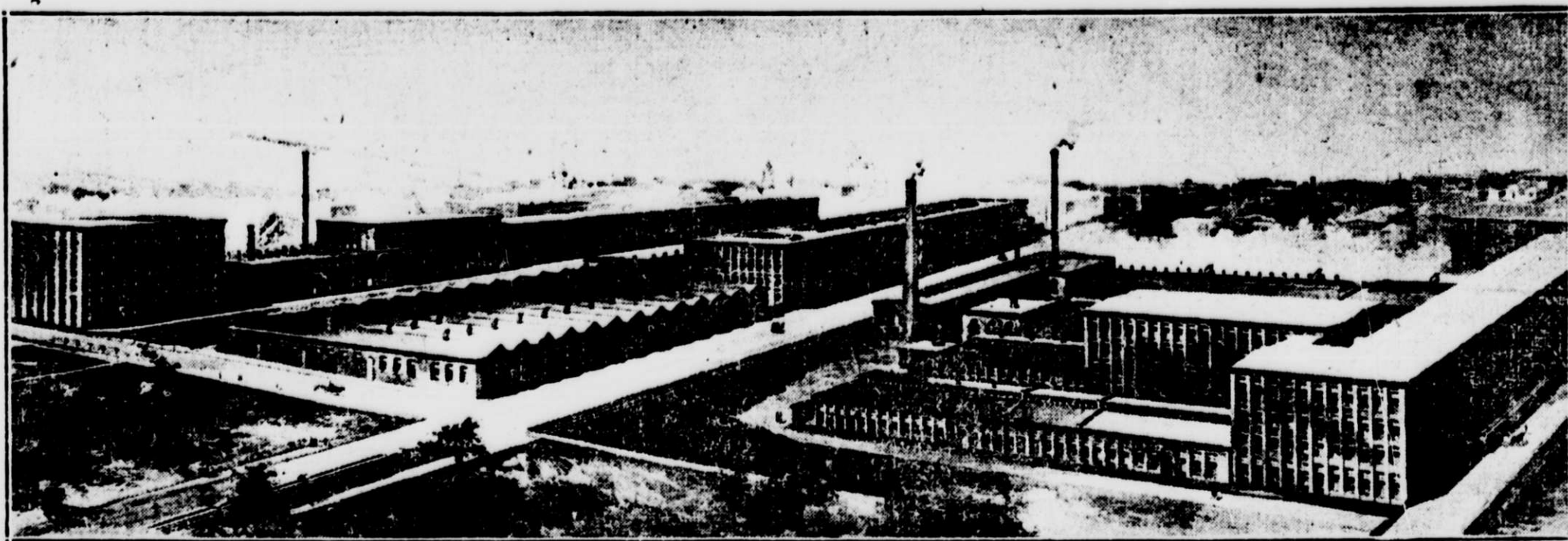
As a result of the invention of machinery for carding, spinning and power weaving the factory system in wool manufacture developed rapidly in England, says the *Textile Manufacturers Journal*, and this change was well advanced before it started in the United States, where it continued for a long time to be carried on as an industry of the home, as in Canada. The supply of merino wool was short and the breed of sheep poor in the United States, and it was only in 1827 that the first flock of merino sheep was introduced here. By the time the embargo on trade was laid on which preceded the war of 1812 several thousand merino sheep were introduced here, but that conflict turned the attention of the young republic to the need of both wool growing and woolen manufacture. The price of merino wool rose from \$1 a pound in 1807 to \$2 and \$2.50 during the war. Compelled to rely on its own efforts in consequence of the non-intercourse act of 1809, the wool clip increased from less than 1,000,000 pounds in 1810 to 20,000,000 pounds in 1812, and during the four or five years preceding the war no industry was so prominent in the public eye as the manufacture of wool. The fame of merino sheep spread until some rams sold for more than \$1,000 each, while broadcloths were sold at times as high as \$12 per yard. Up to this time Great Britain had been looked to as the source of supply of woollen cloths and while certain duties were placed on imports by the first tariff act of 1790, the duty of 5 per cent. on such goods showed that woollen manufacturing was not one of the industries sought to be developed. The United States in fact was the best market in the world for British cloths and the value of woollen goods rose 50 per cent. in nine years, or about 40 per cent.

"As might be expected," says Mr. North in "A Century of Wool Manufacture," "factories for making army and navy cloths, blankets, negro cloths and broadcloths, the great staple woollen manufactures of that time, sprang up in different parts of the country, stimulated by the enormous rise in the price of these necessities," and many cotton mills were diverted to the manufacture of woollen goods. This development was helped by the introduction of steam in American woollen mills and by the more extensive use of the spinning jenny, which was first introduced here only in 1804. The degree to which the minds of the people were centred on the textile industry at the time may be gauged by the fact that of the 237 patents issued in the United States in 1812 more than half were for processes in the manufacture of wool, cotton and linen.

After this great impetus to the wool and other textile industries it might seem strange that the close of the war in 1815 was followed by a general collapse of the home industry while the imports of woollens and cottons increased at a tremendous rate. By 1816 Great Britain shipped to the United States woollens and cottons to the amount of \$20,000,000 and merino sheep dropped from hundreds of dollars a head down to a dollar a head.

The reason the home industry was so easily shattered was that the British woollen industry, which was founded by Edward III. in the thirteenth century under a radical system of protection combined with a strict prohibition of the export of raw wool, had by this time become the great special industry of the British Isles. This preeminence was fortified and maintained by a rigid prohibition of the export of machinery and appliances of the trade under pain of heavy fines, to which imprisonment was added, and the policy of thus holding the secrets of the industry was in fact pursued down to the era of free trade under Victoria.

During the earlier periods of the exist-



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ence of these laws no known instance is recorded in which a perfect textile machine was smuggled into the United States from Great Britain. The models that were introduced were so imperfect that it might fairly be said that the people of the United States had to invent anew the machinery by which, after trying difficulties, the textile industries of the country were at last established. At a later period they were to reap the advantage of this, for some of the most important improvements in the textile industry of the world had their origin in the United States during the last century. A catalogue of these would surprise persons unacquainted with textile manufacturing, who associate all progress in this field with the primary inventions of Great Britain.

Beaten by the older and better organized British industry, the textile manufacturers turned to Congress, and the result was a long series of tariff experiments in which protection was alternately given to manufacturers and farmers, who had become increasingly antagonistic to each other. It required another war, that of the great civil conflict of 1861-65, to force home to the people of the United States the conviction that the production of its necessary textile fabrics must be an essential part of its national policy. "The war of 1861," says North, "recreated the American wool manufacturer." And this new policy began with adequate protection to United States wool, by which the production of the raw material should be first secured. The result of this to the farming interests was that the domestic wool clip, which in 1859 was reported at 60,261,000 pounds,

grew to 100,000,000 in 1880, and has since then reached an average of over 300,000,000 pounds in recent years in a grand total of 500,000,000 pounds worked up in the mills.

From this brief outline it would appear that the founders of the American nation in creating a group of manufacturers which is one of the marvels of modern industrialism had the problem of self-maintenance and self-sufficiency more clearly in mind than any idea of developing a mere trade theory. Whatever the motive, this much appears plain, that the industries based on wool, silk and to a large extent upon cotton were the offspring of a strongly protectionist tariff, and without that tariff would never have been created.

We may now consider the history of the Canadian woollen trade as influenced by the tariff, and this will be very instructive, because the creation of the United States woollen industry at first depended on Canadian wool, and the firm establishment of that industry created in turn a branch of wool growing which had not been possible in the United States before.

Under the reciprocity treaty of 1854-56 raw wool from Canada was admitted free, Canadian sheep then were almost wholly of the Leicester, Cotswold, Lincoln and similar long woolled varieties, and at a time when the worsted branch of the woollen industry had attained a distinct preeminence in other manufacturing countries this afforded an easy opening for the establishment of this branch in the United States. By the time the treaty came to an end sixteen thriving worsted mills were in operation, founded on the wools obtainable from Canada, which were noted for their strength and soundness. Up to this time little or no attention had been paid to breeding long woolled sheep in the United States; in fact, there was a prevalent idea among farmers that the country was not suited for these breeds of sheep. The abrogation of the reciprocity treaty in 1860 raised a new problem and the new national policy of protection and the new national policy of protection all round threatened the very existence of the United States worsted industry. The situation was disclosed by a memorial to Congress from the worsted manufacturers, from which the following paragraph is quoted:

"The manufacture of worsteds, which is just beginning to have an important development in this country, owes its existence to the reciprocity treaty which admitted free of duty the wools of Canada. The farmers of upper Canada, of English and Scotch descent, naturally prejudiced in favor of the sheep husbandry which prevails at home—as England is still called in the colonies—and having a taste for English mutton, imported sheep of the Leicester, Cotswold and Down races, which have thrived admirably on the naturally rich limestone soils of upper Canada. The present production of wool from these sheep in Canada is about 6,000,000 pounds. The Canadians have no fine woolled sheep, (meaning merinos). Protected by a tariff they consume about 2,000,000 pounds of their own wool in the manufacture of coarse cloths, including tweeds, which have been imported largely into the United States, notwithstanding the duty on cloths, and use the balance of 3,000,000 to 5,000,000."

They added that the introduction of the finer lines of worsted goods and the unexampled development of this branch of textiles were due to the command of Canada wools, which were "fully equal to the English combing wools"; but there was not enough of such wools grown in the United States to keep one of the worsted mills running. They were fair enough to admit that if these combing wools were to be grown in the United States the worsted manufacturers would fall into line with the national policy provided their industry could be protected sufficiently to hold the trade during the period of transition. Their views were met by Congress and the result has been the marvellous development that has since taken place in the textile industries of the country. The census of 1905 showed that the United States textile manufacturers employed capital to the amount of \$1,343,321,905 and produced goods to the annual value of \$1,215,036,792. The capital invested in the woollen branches alone was over \$477,000,000, and the annual value of the products \$317,000,000.

The United States tariff of 1865 not only recreated the United States woollen industry and expanded the worsted industry

but transformed the sheep raising business of the country. In 1865 there was not enough of the combing wool such as grown in Canada to keep a single worsted mill in the States running, while in Ohio, for instance, the quality and yield of wool a head was below that of Ontario. Now Ohio has over 3,000,000 head and the combing wool of that State far surpasses Ontario wool in quality, while in total quantity Ohio exceeds the product of all Canada. Montana now raises over 1,000,000 head of sheep and the wool of that State brings an average of 10 to 15 cents a pound more than wool of the same quality and from the same breed of sheep grown just across the border in the Canadian province of Alberta. Michigan is a State relatively insignificant in geographical area with a climate and soil just the counterpart of southwestern Ontario, yet Michigan alone has 617,000 sheep more than all Canada. Ontario in 1907 had 1,108,000 head, or less than half as many as Michigan. There are nine States in the American Union which have more sheep than the whole Dominion.

Thus the imposition of a duty on raw wool and a still higher duty on manufactured goods, not only established the worsted industry but gave birth to the long wool sheep breeding branch of the United States livestock industry.

But what was the result in Canada, where the idea of free raw materials, so called, has been a tradition—especially respected in the textile trades? Raw wool has always been on the free list in Canada,

and though there is a nominal duty of 3 cents a pound under the general tariff (2 cents a pound under the preferential tariff in favor of Great Britain), it is not enforced. The total duties collected amount in some years to less than \$10. Not only is wool practically free, but tops and noils, without which there can be no logical beginning of a really native worsted industry, are also free, while some kinds of yarns are free and all yarns of whatever kind are admitted for the knitting trade at 12½ per cent. when imported from Great Britain under the preferential tariff and 20 per cent. when imported from foreign countries. Rags of all kinds are on the free list. The "preferential tariff," it may here be explained, is a recent departure in Canadian economics, dating back to 1897, when a discrimination of 25 per cent. below the general tariff was allowed in favor of goods from Great Britain, this discrimination being increased later to one-third, with a few exceptions. For a number of years, ending with the adoption of the "national policy" in 1897, the tariff of Canada was a level revenue tariff of 17½ per cent. With the national policy the duties on textiles ranged from 20 to 40 per cent. while, under the preferential tariff, the duties on finished woollen and worsted piece goods in general are 30 per cent., but blankets and flannels are admitted at 22½ per cent., and piece goods may be imported to be finished or dyed at 15 per cent. Under the general tariff the duties on woollen and worsted goods are 35 per cent. Any one with the

slightest knowledge of the processes of manufacturing will see that as a system for developing either a wool growing industry or a native textile industry the present Canadian woollen tariff is a ferocious assemblage of unrelated elements, the outcome of chance or the appeal of individual manufacturers who could impress their personal views upon a government.

The statistics of other live stock show that horses, cattle and swine have fairly kept pace with the growth of population in both countries, and the sole exception to this law is in the case of sheep. In fact, in proportion to population Canada has more horses and cattle than the United States. So far from this being the case with regard to sheep, these animals have actually diminished by one-third since 1871. If they had increased in proportion to population in this period the number of head would be over 3,400,000; and if they had increased in the same ratio as horses and cattle the number would be over 4,000,000, or double the number actually existing.

The manufacture of woollens here remained a domestic industry down to the first quarter of the nineteenth century, when power machinery was introduced into the carding and fulling departments. In 1827 there were ninety-one carding mills and seventy-nine fulling mills in lower Canada and in upper Canada in 1842 there were 180 carding mills and 141 fulling mills. By the middle of the century there were in all Canada about 400 carding and fulling mills and 250 establishments where weaving was carried on

by machinery, and besides these there were about 60,000 hand looms producing over 6,000,000 yards of homespun in the Dominion. The making of homespun cloth continued to increase with the growth of population down to 1871, when the product in all the provinces and territories now forming the Dominion was about 8,500,000 yards of cloth per year. From that date power machinery rapidly superseded the hand spinning, weaving and knitting processes, and by 1891 the product of the hand looms in homespun and flannels diminished to 4,320,000 yards, of which a little more than half was made in the Province of Quebec. The census of 1891 gave Canada 377 woollen mills and 281 places where knitting was carried on, many of the latter being operators of hand knitting machines, as the total hands employed in knit goods were only 2,143. So long as the farmer took his wool to the custom woollen mill and purchased back the product of finished cloth the wool grower and manufacturer thrived together. But when more modern processes were adopted and larger factories were erected the farmer ceased to take a personal interest in the manufacture and began to buy more largely from the stockkeeper, the merchant tailor and the ready-made clothing manufacturer.

It was to the interest of these classes and the newer generation of wholesale dry goods dealers rather to sell foreign-made goods than Canadian because of the greater profits obtainable. This was due to the greater variety of styles that could be had abroad, the patterns and "makes" of Canadian goods being much more limited than now and being easily identified by the consumer. The wonderful expertness of European manufacturers in the use of shoddy and vegetable fibres to mix with wool has given greater opportunities for profit to the merchant, and these causes have led to that systematic destruction of Canadian goods and systematic praise of foreign goods which has resulted in constantly widening the breach between the Canadian consumer and the Canadian woollen manufacturer. The result has been that the imports of foreign raw wool used in the Canadian woollen mills also increases to the displacement of the Canadian raw material, while the Canadian grower of sheep has to ship his wool abroad—chiefly to the United States—for want of a market at home.

Will any one who remembers the wearing qualities of the goods made by the Canadian custom woollen mill from Canadian wool deny that they were of intrinsically better value than the modern fabrics manufactured abroad? It is well remembered that even against the duty consideration quantities of Canadian tweeds were formerly shipped from the maritime provinces and upper and lower Canada to Boston and New York, but it is not well known that the name "Halifax tweeds" was derived not from Halifax, England, as is supposed, but from Halifax, Nova Scotia.

Under the Canadian tariff the principle of protection does not come into force until it has gone past the Canadian farmer. Tops and noils are on the free list, and it is manifest that every pound of tops and noils displaces a pound of Canadian wool. It is equally manifest that no worsted manufacturer would pay the higher rates of wages in Canada and establish a worsted combing plant here to compete under such conditions with the cheaper labor of England or Europe.

This explains why there are only three worsted combing plants in Canada and why all of these imports, more or less of foreign tops to supply their spinning plants. And in other countries worsted manufacturing has made more progress in the last thirty years than the carded wool branch. The worsted industry of the United States, for instance, now consumes 20,000,000 pounds of raw wool a year, while the carded wool industry only consumes 157,000,000 pounds a year. It is evident in mind the fact that the wools of Ontario and eastern Canada are especially adapted to the worsted trade and that the wools of the western provinces, though of different character, are also quite adaptable to the worsted trade if modern machinery is used, the reader will cease to wonder why the Canadian farmer is forced to ship his tops, shoddy and rags, which displace Canadian products of the same class.

In the '60s of the last century, when the United States worsted industry was developing so fast, it occurred to two enterprising manufacturers of the village of Hopedale, Ont., Messrs. Randall and Farr, that they would start a worsted factory. They installed a plant, but finding the conditions against them they applied for a change in the tariff. This being refused they were forced to move to the States, and thus it was that the business which was suffocated here under free trade conditions was established in New England.

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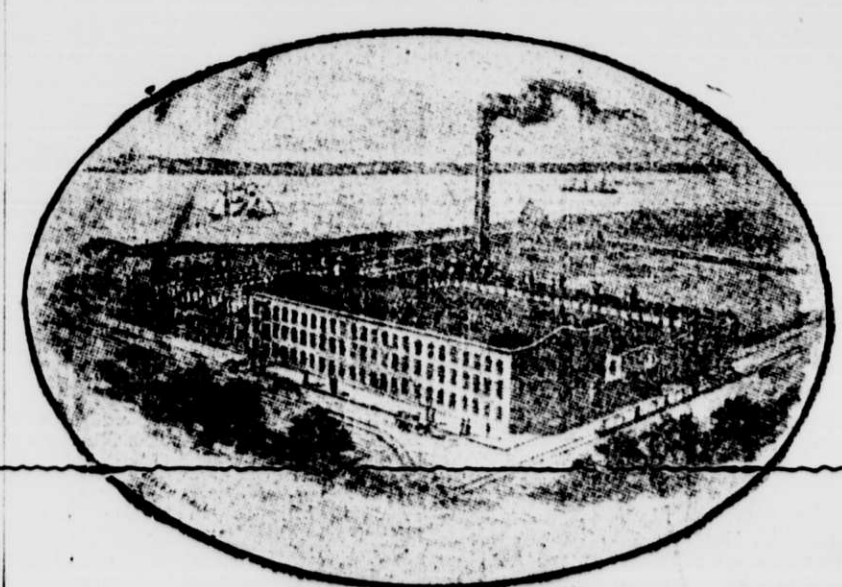
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